

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: "John Spoonhower" <spoon@espec.kodak.com>  
Subject: [1672] 30 M prop.  
Message-ID: <spoon.1156032331A@kodakr.kodak.com>

Everyone,  
Nick, KF2PH was right...that was me working UY0ZA on 30 M the other night. The band has been decent the last few nights....worked OM2SA last night. Heard (but not worked, unfortunately!) were 5B40G and HK0ER about 0130 UTC last evening as well. My setup is nothing spectacular...Ten-Ten Argosy analog and a dipole up a whopping 27 feet in the center. The antenna is fed with balanced line and a modified (and repaired!) MFJ tuner. I put the balun on the input...where it belongs...it's a current balun too. Other recent notable contacts include WB8IJN, Nils, of this list....a member of the no-social-life-friday-night-30M-propagation-study-group. (Thanks for the letter and qsl Nils!)

On a somewhat related note...I'm having such a great time on 30 that I've decided to sell off my OHR Spirit 20M rig. It's in excellent condition, includes the manual and has the curtis keyer board built-in. I haven't priced the OHR rigs lately, but \$150 + shipping sounds reasonable to me. This rig deserves to go to a good home; the buyer must certify that he/she will never attach an amp to the output....:^)  
72, John, kc2du

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: k1lgq@dennis.MV.COM (Dennis Marandos)  
Subject: [1674] 72 Newsletter WANTS YOU!  
Message-ID: <199507131425.KAA19321@mv.mv.com>

Hello to ALL from Dennis - K1LGQ

I am putting together several articles for the October issue of 72, the New England QRP Club newsletter, and would like your input for several items. Would you please send me information for the October issue:

1. I am writing an article for all those who are on INTERNET and wish to have their addresses included in the October issue of 72. All members should address their E-mail address to me separately and for the subject heading, put INTERNET ADDRESS.
2. I am also writing an article on "QRP Hints and TIPS" (nice title) which would cover just about anything you can think of which makes life easier in the QRP construct/operation category. Ideas such as:
  - a. keep your sponge wet when soldering to keep your iron clean

- b. flux paste dabbed onto your work makes the solder flow easier
- c. always carry a tape measure whenever doing antenna work of any kind
- d. nylon string will snag less than cotton string when hoisting antennas
- e. a photo album book is just the right size for your QRP QSLs

I believe you have the idea of what you can send. I will give you credit for what you send to the newsletter and you can send as many and as often as you like. There is no limit to this idea and is concurrent for all issues. Send me your ideas via e-mail with the subject heading QRP HINTS AND TIPS.

3. I am making a collection of Internet address for commercial sites as well. If you know of a company who has anything to do with QRP or radio in general, send it to me with the subject heading INTERNET ADDRESSES. I will publish these and make the list concurrent in each issue. Everything from parts to torriods to power supplies. This is a great chance for those smaller companies, who never get the attention they deserve, to send me their e-mail or HTTP:// address.

4. Everyone has a favorite story to tell and I would like to write an article on some of your favorites. There are so many QRPers on QRP-L that it would be redundant to retell old stories again, but there are MORE QRPers who are just waiting to read of your stories in the newsletter. If you could send me several paragraphs as to what you're doing, where you're headed, what have you worked, who you have made QSO with, what you have for a station, how long you have been licensed and how often you operate QRP would be of great benefit to those reading what you have to say. Because we all learn from other's mistakes, you might send me a note of projects that went into flames and smoked while testing, tuning or operating. I know these stories are always read with delight. E-mail your paragraphs (hopefully--several long paragraphs) and for the subject heading put INTERESTING STORY(S).

5. I have another strange request, but this is different. I am one of the speakers in the ARRL New England convention to be held July 28, 29, and 30 in Manchester, NH. I always like to start off my discussion with a little anecdote...a simple amusing story or just a great joke. Can you send me a humorous joke, etc. to get me started when it's my turn to speak? Certainly you have heard of something amusing and humorous I could use. I would deliver my story with gusto! E-mail your ideas with the subject heading HUMOROUS JOKE.

6. The deadline for the October 72 issue is September 9th, and if you would like to be included in this issue, e-mail your material before that time. In fact, send several ideas and spread out your entries. I will of course give full credit to everything you send me. If you have pictures which you feel would be of interest, send them along as well, or have them posted at a location I can retrieve them. I hope to be hearing from you and will up-date my requests as time goes along.

72/73

Dennis - K1LGQ

Editor - New England QRP Club newsletter

THE GREEKS HAVE A SAYING FOR IT...

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"An idle person has nothing to do so he unfastens and fastens his breeches."  
TRANSLATED: Of idleness comes no goodness.

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Dennis Marandos - K1LGQ, Nashua, NH

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995

From: Byron8LCZ@aol.com

Subject: [1668] Antenna supports for QRP

Message-ID: <950712232231\_113752482@aol.com>

Hi Gang,

I'm looking for portable supports for a dipole type of antenna. So far, I've found a fiberglass telescoping pole (for painting houses), its 8 ft collapsed and 24 ft extended. it sells for 75.00 dollars. Has anyone seen anything any better or more cost effective than this. I'm looking at buying two of them. I need something that will fit inside my car and yet extended to a reasonable height for an antenna. my target length is 33 ft. It will need to be guyed once erected. I have used steel telescoping masks, but they are very heavy, need two people to put one up and wont fit inside my car.

72, Byron WA8LCZ Detroit

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995

From: cebik@UTKVBX.UTCC.UTK.EDU

Subject: [1665] archived lists of books and periodicals

Message-ID: <Pine.PMDF.3.91.950712204954.547402799B-100000@utkvx.utk.edu>

We (Jim Eshleman and I) have just completed archiving the lists of electronics books, antenna books, and qrp periodicals that were posted on this list in late May. They are in compressed format, but will uncompress automatically if you request them without the ".z" suffix.

To obtain the files, you may use the following "anonymous ftp" procedure:

ftp ftp.lehigh.edu

anonymous (in answer to name request)

<your email address> (in answer to password request)

```
cd pub/listserv/qrp-1/books
get filename.list (replace "filename" with name of file)
```

The filenames in the "books" subdirectory are these:

```
periodicals.list  qrp periodicals
antenna.list      antenna books
electronics.list  qrp electronics books
```

If you wish the files in compressed form, replace the "get" line above with these two lines:

```
bin
get filename.list.Z
```

If I have made an error in this procedure, Jim will correct me (I hope). I shall try to update the lists quarterly as a minimum, more often if justified by the importance of data received. Please send me info on any new books or periodicals that are not on the lists but should be there. Also send me corrections to any of the data given.

Thanks in advance for your interest and assistance. And thanks to Jim for his tireless efforts to make the qrp-1 facility at Lehigh a true service to this group and other amateurs who might access the ftp site.

-73-  
LB, W4RNL

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: fmoor@magicnet.net (Fred Moore)  
Subject: [1663] assistance please  
Message-ID: <199507130042.UAA15468@magicnet.magicnet.net>

After many years of pounding the keys, (green and paddles), operating satalite, packet, and building repeaters. I am ready to take the plunge into the real worl of ham radio. I do not have any problems building from scratch, kit form etc.. I have access to as much test equipment as necessary to get a rig going.

However after watching this group for the last two weeks and searching the archives I still find that I am missing a lot of information that is in the heads of the very knowledgable people on this group. This practical information is information that can make a newbie's experience pleasant, or miserable. Any and all help will be appreciated.

I have found the review lists, and read them. All of the specs are nice,

but don't really answer questions like, is the rig microphonic when tapped, how smooth is the tuning, is the dial accurate how much backlash etc.. Also I didn't find a listing of suppliers of parts or kits..

If anyone has the time to send me a note (not post) suggesting a rig I would greatly appreciate it. please include the following information.

I know this is a time consuming request. I will compile the results of this request and post it to the group... Thanks in advance for the effort..

In your opinion what is the best rig (single band)?

Do you own this rig Y/N

Have you operated this rig Y/N

How and where can this rig be acquired?

Where is information on this rig available?

How much does this rig cost?

In your opinion what is the best rig multi-band?

Do you own this rig Y/N

Have you operated this rig Y/N

How and where can this rig be acquired?

Where is information on this rig available?

How much does this rig cost?

What accessories do you consider essential when operating QRP?

Do you operate battery power or AC supply?

If you had to limit your operating to just one band what band would it be?

What subscriptions do you find essential to get all needed information on QRP operation rigs etc... ?

thanks:

---

Fred Moore (ARS: WD8KNI)

E-Mail: fmoor@magicnet.net

Work: Phone: (407) 678-7233  
Central Florida Safe & Lock ESD, Inc  
2070 Forsyth Rd  
Orlando, Fl 32807

Home: 2118 Allspice Ave.  
Orlando, Fl 32837

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: JimN00CT@aol.com  
Subject: [1662] Balanced twinlead  
Message-ID: <950712195947\_113598800@aol.com>

JCoote@aol.com

Wrote:-----

I've been considering using shielded twin lead, or making my own shielded twin lead for a zepp style antenna. My reasons for doing so would be to lessen radiation from the feeder; to keep the feeder from picking up other RF (computers, etc) in the shack; to lessen the need for standoff insulators and special mounting.

The options for shielded balanced line appear to be:

1. Using "Twinax", a shielded 120 ohm balanced cable.
2. Using shielded 300 ohm TV line.
3. Using two 75-ohm coaxial cables ( 150 ohms) with the shields bonded and the cables close together.

-----  
Snip!

Twinax works very well, but has fairly low impedance. As far as SWR loss is concerned, open feeders are the best. I don't know what the loss in twinax is. If you're going to parallel some coax, might I suggest you use RG-62?

It is 93 ohm, and because of the air core it has lower losses than RG-8. I have been thinking about feeding my dipole with this.

As far as the grounded shield, ground it at the antenna tuner. Dont worry about the antenna end. If you use RG-62, be sure to seal the ends extremely well as the dielectric is mostly air!

73, Jim N00CT

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: John Foote <footej@hn.va.nec.com>  
Subject: [1692] Canadian Amateur Privilidges  
Message-ID: <9506138056.AA805670735@bills.hn.va.nec.com>

Can anyone help me fill out the info I need to take my gear into Canada during my August vacation?

I wrote the ARRL and got their rundown on Canada so I know I don't need an additional license. I use my call with the "VK " added when signing.

It also said I can take my radio equipment into the country without any expected customs problems. They even gave me the paragraph to cite if the border person is confused.

But here's the question:

When in Canada I operate under CANADIAN rules and have privileges according to a Canadian license. So what exactly are the privileges for the Canadian equivalent of a US "Advanced" Class license?

Another question is have I forgotten to find out anything, or it (as Ross Perot would say) "just that simple"?

Thanks in advance for any notes you have time to jot down (either by way of travel experience, living in Canada).

72 de KR4GL

John Foote

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995

From: Bruce Robertson <brucerob@epas.utoronto.ca>

Subject: [1685] fitting a boot to the 40-40

Message-ID: <Pine.3.89.9507131228.B11050-01000000@blues.epas.utoronto.ca>

I know of at least one other person on the list who has an interest in fitting a 5w amp like the one in \_W1FB's QRP Notebook\_ onto the 40-40 design. Motivations for such an action vary; I can only use 6 foot whips at home (an apt.) and find .9w taxes the other guy's patience, unless I'm working a QRPer.

The simplest answer is to make it outboard and add a xmit/recieve switch, but then one loses the heavenly QSK.

Looking over the schematic and pc board, I've been considering another solution. I post it here for general criticism before I try it out. The general principle is to insert the amp between the final of the 40-40 and its T-R switch pick-off point. In practice, this amounts to lifting one lead (that closest to the final filter) of the 0.1 mmf blocking cap. One attaches RG 174 to that cap lead and to a ground hole (which one must make.) The output of the amp goes into the pcb hole left by the lifted cap lead and another personally-made ground hole. As a sophistication I

would use RCA jacks on the RG 174 so that one might bypass the amp for that true QRP experience (or when I'm using real dipoles!)

There are only two issues I can see: 1) I would need to add a half wave filter or two after the 40-40 final and before the amp. Although the output should be pretty clean, since we only need .25w from the 40-40 final. 2) Can the T-R switch as it is stand, say, 7w (worst case) from the amp? Anyone with an opinion on this? I would have to figure out this part of the circuit first :-)

I'd appreciate if those of you with the diagrams for this rig would look over my idea, since I \*love\* my 40-40 as is and would hate to fry it. If I'm thinking straight, it looks like a pretty simple mod that only would require drilling two new holes in the ground field of the pcb.

72, VE3UWL

Bruce G. Robertson Dept. of Classics, U. of T.

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: Mark E Gustoff <Mark\_E\_Gustoff@ccm.ch.intel.com>  
Subject: [1682] FS: TT Argo509

For Sale:

Ten-Tec 80-10 SSB/CW rig in VGC. Ten-Tec 206A 25/100Khz calibrator. Cw Filter (Active), and Desk Microphone I built for this rig. Shipped to your door for \$275.

73,  
Mark

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: Chris Doherty <doherty@lydian.scranton.com>  
Subject: [1666] gel cells and other power supplies  
Message-ID: <Pine.3.89.9507122128.A4250-0100000@lydian.scranton.com>

Got my QRP+ back from service at Index labs. A tantalum cap decided to short out. Good service, no hassles. Turn around time was 19 days including 6 to 10 days for shipping.

I'm looking for info on portable power supplies for the rig. What's hot, what's not. I'm hoping that the collective intelligence of this list,



which I know resides just on the other side of this crt, will manifest itself as characters on the screen and enlighten me.

I have been hearing voices lately and funny little noises like dwadidwadit dwadwadidwa (was it a chirp I heard?) so I might as well see words. Let me know if they are coming for me. I think I hear them. Stealthy little devils. So silent, so quick. I reach for my medication. I don't think I'll make it. I'm slipping. Darkness reaching up. Palpable. Cunning. They're here. You didn't warn me. Be careful. You may be next.

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-73- de N3UVR qrp

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0(o o)0

Take me to your leader. (\_|\_) Leader? What leader? We don't got no  
<(<\_\_> stinkin' leader!

Chris Doherty <%%%%>  
doherty@lydian.scranton.com

\*\*\*\*\*

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: Mark E Gustoff <Mark\_E\_Gustoff@ccm.ch.intel.com>  
Subject: [1681] Great SW Storm

Hi Gang:

Last night a rather typical storm formation occurred for our monsoon rainy season here in Phoenix. I said rainy, although half the time the storms only produce a shower of dust and dirt in the form of a sandstorm.

But last night we kicked up a complete package filled with all sorts of good things: Dust, Lightning, and 2" rain in 1 hour (that's rare here in the desert). The worst was the wind which I can only estimate between 60-80mph at times...truly dreadful sounding and looking.

I stood outside and watched from my patio and I saw my GAP Titan vertical swinging from horizon to horizon and bending down to a 45 degree angle with the earth. I kept watching because I was sure it was just going to snap the 10' steel mast that is buried 3' into the ground. But it held and it didn't even bend the mast or any part of the antenna. Three houses to my west a fellow ham now has a 60' crank-up tower (not

cranked down) which is permanently slanting at a 45 degree angle with the earth. It looks as though it bent at the base, or pulled the base up out of the ground.

All in all I give my hardy recommendation for the GAP vertical, and offer one piece of advice: A crankup tower should be cranked down in storms.

73,  
Mark de W07T/QRP

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: "Richard Hieber" <SZ0026@daphne.rrze.uni-erlangen.de>  
Subject: [1683] HW-8 price, doku?  
Message-ID: <19F6A901D25@daphne.rrze.uni-erlangen.de>

Hi gang,

a friend of mine is the second hand owner of a rig that he had previously identified as an HW-7, but now he tells me it is an HW-8. I don't know if this says anything about its cosmetic condition ;^)

Anyway, he doesn't use the rig 'cause there are problems (I think in receive) and he has NO documentation. I told him that it might be possible to get documentation (i.e. circuit diagram and instruction manual) via this list. So if you have the original paperwork but no rig tell me how much you want for getting it shipped to Germany. In the much more likely event that you have the kindness to xerox the pages, this is fine also, so would you please let me know how much this would be?

I asked my friend if he is willing to sell the rig. Problem is, he is not sure how much to ask and I am not sure how much to offer. Trying to barter he showed interest in a 300 MB harddisk which is equivalent to about 100 USD nowadays and falling in value each day. ;-)

Is this an reasonable offer? Keep in mind that the rig needs some work.

Thanks for offering your opinion.  
Richard

--

Richard Hieber, DL8MFQ/AA8CP  
sz0026@daphne.rrze.uni-erlangen.de



you let me  
know which newsletters are good, also the kits for QRP that you like. I just  
ordered the pixie2  
kit. It will be my first QRP experience. Any fixes for this kit? Any problems with  
it? Thanks  
in advance!

Jay  
WA6MOK

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: adams@chuck.dallas.sgi.com (chuck adams)  
Subject: [1667] NN1G-NN1G 30M contact  
Message-ID: <199507130255.VAA04691@chuck.dallas.sgi.com>

Made my first NN1G to NN1G xcvr contact  
on 30M between TX and NC. Guy was not  
a member of this group and has only been  
doing qrp for two months. He was having  
a lot of fun and was excited about the  
new life he had found. Been a ham 26 yrs  
and never tried it before. We are winning  
'em over one by one.

The reason for this posting was that I found  
my AC Hum problem. It was not the clock but  
a lousy ground system. Cured that in a hurry  
and now we are back on the air with no muss  
and no fuss. Looks like Bob got lucky again.

Back to the race on 30M.

dit dit

--

Chuck Adams K5FO CP-60 adams@sgi.com

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: PB13128@deere.com  
Subject: [1677] NOTE 07/13/95 10:13:46  
Message-ID: <DACDXX21.PB13128.844713100095194FDACDXX21@TCP30.DX.DEERE.COM>

Subject: Internet QRP magazine

Is it time for a monthly/quarterly QRP publication in an electronic format?

All of the various QRP related magazines or newsletters e in existence certainly serve a useful purpose and I wouldn't want to see them replaced. But if you look at the world wide audience of this reflector and the impossibility of subscribing to all of the paper publications isn't it time for an internet QRP publication?

Think about it.....discussion thread can stay on the reflector and flames can be sent to me, we're having a heat wave in the midwest anyway.

Incidentally conditions in the midwest have been great from 144 MHz up through the microwave bands. If you're a VHF'er, QRP or otherwise, connect the coax and turn on the rig!

72/72,

Pete, NN9K  
pb13128@deere.com

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: Bill Acito 13-Jul-1995 1011 <acito@asdg.enet.dec.com>  
Subject: [1673] RS12/13  
Message-ID: <9507131412.AA26005@us1rmc.bb.dec.com>

Anyone in the group work RS12/13 using their QRP rigs?

Is it possible to work this bird at QRP levels?  
I thought I remember some discussion during the Field Day  
reports.

b

. . . . . - I own my own words - . . . . .

Bill Acito	d i g i t a l
acito@asdg.enet.dec.com	Digital Equipment Corporation
	Digital Semiconductor - Fab 6
	Hudson, MA

kc1gs  
(qrp-ne #260, norcal #1147, arrl life)

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: NYOUNG@nova.wright.edu

Subject: [1664] tower pieces

Message-ID: <01HSS0HQZT8M8X1NDL@nova.wright.edu>

I have recently learned of two residential TV towers that have become unnecessary because of the cable TV invasion. The owner of one is not worried about getting it taken down, but the owner of the other would very much like to have it disassembled and moved. That's the deal: you come over. You take down. You put in truck, you take back home. You paint pieces. You put 'em back up wherever you want.

If you're interested you'll have to email this person: PSIMMONS@DESIRE.WRIGHT.EDU. This is a chance for free tower, which I could use but do not have even the slightest desire to arrange a work party to get. Acrophobics have it rough. We have to find insane friends without fear of heights and a reckless spirit. Me? I won't even stand on a coffee table without a safety belt.

73

Nils

WB8IJN &c

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995

From: NYOUNG@desire.wright.edu

Subject: [1679] tower pieces (addendum & amplification)

Message-ID: <01HSTJ84I14M94N8ZW@desire.wright.edu>

I failed, as Mike (AA0UB) has noted, to tell where these tower chunks are. They're around Dayton, OH, in an outlying suburb called Beavercreek, a place where the beavers have long since ceased to maintain mailing addresses. Thus, if you're in, say, Tamil Nadu, and want these tower pieces, you'll have to arrange transportation a bit more elaborate than the pick-up truck that I had mentioned. Such is life among us who are \_pagal\_.

73

Nils

WB8IJN &c

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995

From: robinsonw@mncppc.state.md.us

Subject: [1696] WTB - QRP rig

Message-ID: <9506138056.AA805679746@SMTPLINK.mncppc.state.md.us>

I am looking to buy a QRP rig (ssb/cw). Something on the order of a MFJ - 9420, Ten Tec 555, Ten Tec 556 or an Index Labs qrp+. If anyone has one for sale or knows of one, please let me know. Thanks.

73, Walt WB3CDX      robinsonw@mncppc.state.md.us

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995

From: Robsparks@aol.com

Subject: [1688] Zipcord Dipole

Message-ID: <950713140006\_114138162@aol.com>

Hi Gang:

A while back, someone on the list mentioned the possibility of using zipcord separated along one end to form a dipole. The other, unseparated portion would then be run ladder-line fashion to, presumably, a balun or tuner. I must have missed any followup discussion, and am very interested in the results/problems with this idea for a simple, compact, antenna. Thanks in advance for any info.

Bob Sparks AB5ZD      email: robsparks@aol.com

P.S. Last few nights at about 0100 z at the very bottom of 30 meters, Jura, OM2SA, has been CQ'ing. I easily worked him last night with my battery powered MFJ 9030 at 5 watts. He will likely be there again tonight...

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995

From: Peter Simpson <peter@thoth.st.3com.com>

Subject: [1676] [long] My experiences building the Pixie 2

Message-ID: <Pine.SUN.3.91.950713081444.1943F-100000@Thoth>

Well, I had my first Pixie 2 contact last night. What a neat little rig! Building it was an educational experience, and the help I got from people I've never met was nothing short of astounding! I'm writing



this to try to pass on a couple of things I learned.

First, building the Pixie 2 on a sheet of copperclad, ugly style, seems to eliminate a lot of the feedback and grounding problems. With that big ground plane, I had no problems with motorboating or RF where it wasn't wanted. I put a 10 uF and a .01 cap in parallel at the power input anyway.

The transmitter came up right away. No problems at all. But when I came back from Radio Shack with my LM386, I couldn't hear anything at all. Not even hum, when I touched my finger to the input pin of the 386. After doing some checking with a voltmeter, I discovered my battery was only putting out 5 volts. (Moral: when testing a new project, don't rely on the batteries you find in the fridge!). After replacing the battery...still no audio. Well, clicks when I turned the power switch on, but no band noise like others had reported.

I pulled out my trusty voltmeter again, and took a look at the National databook. Hmm...3.5 volts on pin 6 of the LM386...sounds a bit low. Check the data book. Well, it's supposed to run on 4 volts min. But it can draw between 4 and 8 mA. That means a 1K value for R5 is right on the hairy edge. Let's try dropping it to 300 ohms and see what happens. Bingo! Touching things with my finger now causes hum in the headphones. But sticking a 10 foot piece of wire in the antenna connector still produces nothing in the phones.

Well, out to the front yard with rope, 130 feet of wire and a rock. Thank God for trees! [1 hour later] Connect coax to Pixie...hey! I hear stuff! I guess it really needs an antenna before you can hear anything :-)

Called my friend who lives 5 miles away (for the third night in a row) and asked him to fire up his TS-430. He calls right back and tells me W1AW is running code practice and he won't be able to hear me. I turn on the Pixie and get my ears almost blown off! Guess that amp is working!

8:45 PM -- my friend calls again. W1AW has finished. I get outside on the front porch [coax is short] and

start callnig him. I hear him answer [I slap mosquitos]  
but he could just be calling me...I send him something,  
but he doesn't reply. Call him on the phone. Yes,  
he did hear me, I sound great! We have a short QSO.  
This is a hoot!

I built my Pixie in a plastic PacTec box which has a  
9 volt battery compartment. The key is a kekboard key  
and I added a power switch and an LED which draws 2 mA.  
The only thing I changed from the original Pixie 2 design  
is the LM386 power switching circuit. I changed R5 to  
a third 2N3904, whose collector goes to +9V, the emitter  
connects to C10 (I might add a 300 ohm resistor between  
the collector and C10, to make the amp turn on smoother)  
and pin 6 of the LM386. The base is pulled up to +9 with  
a 4.7K resistor and also connects to the anode of D1.  
Although this does add a third transistor, the amp works  
\*really\* well, now, and the key down current wasted  
goes down from 8 mA with R5 = 1K to around 2 mA.

Great project! My sincere thanks to the designers and  
most of all, to the qrp'ers who responded to my questions  
earlier in the week! My advice to those who haven't yet  
built this rig is to start warming up that soldering iron!

Peter  
--

Peter Simpson, KA1AXY	Linux!	Peter_Simpson@3mail.3com.com
3Com Corporation	The free Unix	(508) 836-1719 voice
Northborough, MA 01532	for the 386	(508) 393-6934 fax

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: "rohre" <rohre@arlut.utexas.edu>  
Subject: [1695] RE "Grounding and Shielding Tech....."  
Message-ID: <n1406473055.24599@msmailgw1.arlut.utexas.edu>

"Grounding and Shielding Techniques in Instrumentation" by Ralph Morrison.  
I should have included this, Harry, here you go: publ. is John Wiley and Sons,  
New York. should be available on order thru Book Stop or Barnes and Nobel, or  
even in stock at Engineering Dept. of college bookstores. "a Wiley- Interscience  
publication" ISBN 0-471-02992-0 That was on my 2nd Ed. and I think he is up to  
third Ed. Hope you find it OK. I should see Ralph in Oct. if he makes the  
International Telemetry Conference, and if you have a problem locating the book  
be sure and let me know and I will see if the later editions had a different

publisher, etc. I should be able to do a check thru our in house library.  
72, Stuart K5KVH

From qrp-l@lehigh.edu Thu Jul 13 19:03:00 1995  
From: Jim.Nestor@ey.com  
Subject: [1680] RE: 72 Newsletter WANTS YOU!  
Message-ID: <00145000013996120000002\*@MHS>

Dennis,

What is YOUR Internet address? (so I can send some stuff direct).  
Also, who is the membership chairman for New England QRP Club so I can send him \$10 and "join up".

73/74/75,

Jim, WK8G

-----  
From: usinet(qrp-l)  
Subject: 72 Newsletter WANTS YOU!  
From qrp-l@lehigh.edu Thu Jul 13 19:03:00 1995  
From: prvalko <prvalko@Oakland.edu>  
Subject: [1670] Re: assistance please  
Message-ID: <Pine.0SF.3.91.950713081608.8170B-100000@saturn.acs.oakland.edu>

On Wed, 12 Jul 1995, Fred Moore wrote:

> After many years of pounding the keys, (green and paddles), operating

[SNIP!]

> In your opinion what is the best rig (single band)?  
Tough Q. I like my Norcal 40a very much, but the MFJ's have a lot going for them with the built in keyer and selectable filter options. But since it's easy to add to the NorCal, I guess I'll have to say the 40a. IMHO

> Do you own this rig Y/N  
Yes

> Have you operated this rig Y/N  
Yes

> How and where can this rig be acquired?  
You can get it from Wilderness Radio

> Where is information on this rig available?

I think the QRP archive may hold their address

- > How much does this rig cost?  
@ \$130
- > In your opinion what is the best rig multi-band?  
QRP ONLY would have to be the QRP+, although my FT-900 turned down to 2w out is much better at only double the cost ;-).
- > Do you own this rig Y/N  
No
- > Have you operated this rig Y/N  
Yes
- > How and where can this rig be acquired?  
Index Labs
- > Where is information on this rig available?  
Index Labs
- > How much does this rig cost?  
We got a group order of 37 of 'em for just over \$500, they retail for about \$600
- > What accessories do you consider essential when operating QRP?  
Patience, and humility.
- > Do you operate battery power or AC supply?  
Both!
- > If you had to limit your operating to just one band what band would it be?  
40M is always open
- > What subscriptions do you find essential to get all needed information on QRP operation rigs etc... ?  
The QRP-1

73 =paul= wb8zjl

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
 From: GREGOIRE@VALLEY.NET (ERNEST GREGOIRE)  
 Subject: [1694] Re: Canadian Amateur Priviledges  
 Message-ID: <199507132005.QAA02802@dartvax.dartmouth.edu>

--=====805676973==\_  
 Content-Type: text/plain; charset="us-ascii"

- > Can anyone help me fill out the info I need to take my gear into
- > Canada during my August vacation?
- >
- >
- >
- > Thanks in advance for any notes you have time to jot down (either by
- > way of travel experience, living in Canada).

>  
> 72 de KR4GL  
> John Foote  
>  
>

Hello John,

I hope this is helpful.

The www page for the rules and regs can be obtained here.

<http://www.cam.org/~dino/RIC25.htm>

I also copied the rules that I think you were interested in. They will be in attatchment,(I hope). So if the attatchment is a bust, just surf the web to the site I posted and you can get it for yourself, plus a lot more.

I'm going to VE2 land in August, on the Bas St, Laurent. CUL OM on the air, maybe.

-----\_805676973==\_

Content-Type: application/mac-binhex40; name="RIC25-SC.HTM"

-----\_805676973==\_

Content-Type: text/plain; charset="us-ascii"

de AA1IK ( Lead by example, It is much easier )  
( to pull a string than it is to push it.)  
Ernie Gregoire ( )  
Canaan, NH. ( )  
(\_\_\_\_\_)

e-mail : GREGOIRE@VALLEY.NET

packet : AA1IK@WA1WOK.FN43FE.NH.USA

-----\_805676973==\_--

-----  
NOTE: The following Macintosh file(s) are enclosed with this message, in BinHex format. If your mail system does not convert BinHex files automatically, you will need to transfer the message to a Mac and run the BinHex application to decode it.

Filename: RIC25-SC.HTM      Size: 2767 bytes

-----  
(This file must be converted with BinHex 4.0)

: \$&\*3c)e,90\$,NK863"849K8G\*!#H(3!N!3+P!#3"%Gm2'KdE@`q\$6aSC@&N2Jf  
3!cadDA4XC6j558-Y-M8k)&0\$5%9%98a&)%Q3!M`[G'PdE'8q\$6`[D'9KC\$i02' \*  
[C(Nq\$6aMC@jdCA)q2%Jc2P\*eE'9c)'&ZC#5C@GeE'&dD@pZFb""CT!#C@odD@j  
R)(4SC5""E@&dCA9b)&0PFRCTBf8m,dJc2Jd\*N!Bm5\$)q8Q&ND@pMEff3!R9ZD@  
KG'P[EL"\*EQC[FQeKG'P[EL"\$DA\*MG@aKFL"558-Y-M8m,dJb2Jdm5&)q\$C!&2%J  
b2P0\$5%9%98a&)%Q3!M`[5\$)q2(!q\$C!#&0PBh4TEfiJ0\$8JB@jN)\$8b)(4[)\$8  
f+6a"2Jf3!Ma)-cj'8N9498913eNJ3N&14&-J38j%)\*"6N4A58485&-J4Np5)&9  
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"6N3J58iJ8N9(58p1)\$)m,dJc2Jdm,f0PER4PFMi02'Kb2Jdm8&\*&2JdJN!p\$Efa  
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PEQ0j)%\*KEQ3JN!K0BAKTEA9Y)\*!,6h"PFQ&dEh)J8A9KE'PQD@0KG'P[ER-0)\*!  
L3Q&ZC(GTC(4S2#p38N8q2%K52Jd\*N!F02&"546i0-5iJN!Ba,MJ'N!)JG'mJN!3  
b,M#3!b"05(SJN!Ff)'Y)HL#3#d)JB@jN)\$8X)'pb)%JB@jN)\$%b\$6)Z)\*!'-bi  
e-\*!#)(4)\*!%0#i`N!-J68Kk)\*!(0L"V5(SJN!Y#)'&ZC#!e,#"[FL"#)'&ZC#!  
a-Jdc,L#3"MFZ-\*!\$)(4)\*!%0bic-\*!#)%e)HL#3"cBJDdKk)\*!,3L"KEQ3J-6)  
00#iJN!8a-#ia-\*!#)(4)\*!\$-6!Z-68')%e)HL#3"cJJDdKk)\*!,3L"KEQ3J-6)  
005iJN!8a0#i`N!-JG'mJN!-a0#ic06!J68Kk)\*!(0L"V5(SJN!Y#)'&ZC#!a-Jd  
f,L#3"6%i,M!f1#`dEb#3!c%i,M%f1#`05(SJN!Ff)'Y)HL#3#d)JB@jN)\$%b\$6F  
Z)\*!&-M%Z-\*!\$)(4)\*!\$-M%Z0\$8')%e)HL#3"cBJDdKk)\*!,3L"KEQ3J-6)01#i  
JN!8b0#fi16!JG'mJN!-b0#ijN!')%e)HL#3"cBJDdKk)\*!,3L"KEQ3J-6)015i  
JN!8b1#i`N!-JG'mJN!-b15ih-\*!#)%e)HL#3"M)`)'Y)HL#3#d)JB@jN)\$%b\$6%  
,L#3"\$8',M#3!b"dEb#3!c8d,M#3!b"05(SJN!Bc-#`V5(SJN!Y#f\$6'3!LiJN!-  
a0\*!#f,M#3!b"dEb#3!M%d1#i`N!-J68Kk)\*!'-c!JDdKk)\*!,3Jda-LiJN!-bn!)  
,M#3!b"dEb#3!M+3!M8Z-\*!\$)%e)HJNjN!)a-\*!#)'Y)HL#3#d)0-6-Z)\*!\$0\$-  
,M#3!b"dEb#3!M3e-#i`N!-J68Kk)\*!'-6)J68Kk)\*!,3Jda0#iJN!-j-\$)Z-\*!  
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3"\$)Z0\$8')%G)HL#3!dj[G#`cF'9MD@CTC@3JN!G#f\$6%h,L#3"6-Z-c#3!L"dEb#  
3"\$-Z06#3!L"(5(SJN!01Eh3JFh"PBfPQD@9N)\*!(3Jda1#iJN!8e,MBe-#`dEb#  
3"\$8Z16)e)%G)HL#3!dj[G#`cF'9MD@CTC@3JN!G#f\$6%j,L#3"\$%`,M#3!b"dEb#  
3!c%`,M8'N!)J4dKk)\*!\$6Qpd)(0`C@0TCQPPC#f3"d)0-M!Z)\*!%-M3Z-\*!\$)(4  
[)\*!\$-M3Z-\$8')%G)HL#3!dj[G#`cF'9MD@CTC@3JN!G#f\$6)a,L#3"\$)d,M!e-#`  
dEb#3!c)d,M)e-#"(5(SJN!01Eh3JFh"PBfPQD@9N)\*!(3JdbN!)Z)\*!%0\$FZ-\*!  
\$)(4)\*!\$0\$FZ-M#3!L"(5(SJN!01Eh3JFh"PBfPQD@9N)\*!(3Jdb-biJN!3h05i  
e-\*!#)(4)\*!\$0cBZ-\*!\$)%G)HL#3!dj[G#`cF'9MD@CTC@3JN!G#f)!db0#iJN!3  
h0Li`N!-JG'mJN!-i-5i`N!-J4dKk)\*!\$6Qpd)(0`C@0TCQPPC#f3"d)0-M8Z)\*!  
\$-63b,M#3!b"dEb#3!M%dN!)Z-\*!\$)%G)HL#3!dj[G#`cF'9MD@CTC@3JN!G#f\$6)  
f,L#3!c%dN!)Z-\*!\$)(4)\*!#-63j,M#3!b"(5(SJN!01Eh3JFh"PBfPQD@9N)\*!  
(3Jdb0biJN!-b0\$Z-\*!\$)(4)\*!#-M3i,M#3!b"(5(SJN!01Eh3JFh"PBfPQD@9  
N)\*!(3Jdb1#iJN!-b0\$JZ-\*!\$)(4)\*!#-M8',M#3!b"(5(SJN!01Eh3JFh"PBfP  
QD@9N)\*!(3Jf3!c`[8&\*&2JdmD()q\$6a`FQ8q\$8j[G'8k)#\*#f)L"YC@&ZFb"KEL"  
"E@&dCA9b)%p`CA\*KG'pb\*h-J3f9bG'PQD@0KG'8JGfPdD#`#BA0TBb"4G@&XD@C

TBf&dD@pZ1`dJN!BL05)JE@9KER-JB@iJ3@eKG'9eFL"2F'9bBA4[FLGc)%0PFR4  
TCQPMBA4P)(GTG'JJ6@pbFf8J3fpNC5!S05"h,R!ZE5iT\$5#3#P&eB@aTCQPMBA4  
TEfil)'&ZC!dJN!BL-6)L)'ePB@jc)'&Z)%&YBA4PGA)J6h"PFQ&dEh)RFb"\$CA\*  
dD@CTBf&dC5"hDA4S)%e[FR0P)%0[C'8J+\$%b)(FZF#jY,LN0)\*!+8A9KE'PQD@0  
KG'P[EL!Z)!dJN"F\*\$6`[F(\*P2JdmBf9ZG'9b2P"bCA13!L!m35")8N9'25\*558-  
b05jSG'eX)MjSCA\*P2#p"2L"dEb"bCA4eFQiJG'mJF(\*PGQP[GA-JF'&RC5"[FL!  
m33e)8N9'25\*bD@-ZD(4YE#)qD'9bC6`[36iJG'mJCfmJBQ&MDb"dEb"dD'8JG'p  
'\*)#2#pMC@jdCA)q2(!q\$5#3\$3dm,f\*[C(Nq\$6`[D(4YE\$i0&L-!N!)!:

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: lhalliday@creo.bc.ca  
Subject: [1697] Re: Canadian Amateur Privilidges  
Message-ID: <9506138056.AA805674337@mail.creo.bc.ca>

John KR4GL asks about operating in Canada...

Register your equipment with U.S. Customs before you leave. Canada Customs don't care, but if you can't prove U.S. origin, you may have to pay import duty to take it back to the U.S. The Canadian form Y38 is green and entitled "Identification of Articles for Temporary Exportation" (I have one in my wallet for my DX380 and HTX202, which accompany me on business trips). You'll need the U.S. equivalent.

As far as operating goes, your privileges are the intersection of what you can do at home, and what you can do here. You must observe U.S. bandplans, just as I must when I visit the U.S. You must observe Canadian power limits (somewhat lower than U.S. limits). As must I. You can't transmit between 420-430 MHz in Canada, even though you can at home. And so on.

You need a copy of RIC-25 (our equivalent of Part 97), which spells all this out. Ask your local Canadian consulate.

73 from Burnaby,  
laura VE7LDH

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: JessQRP@aol.com  
Subject: [1671] Re: NN1G-NN1G 30M contact  
Message-ID: <950713095459\_113980536@aol.com>

I am just wondering if I am the only one out there in the world that can't

squeak more than 700 mils out of my NN1G 30 meter rig. I know that Chuck had said that he might put his on a spectrum analyzer to see what happens when the out put is pumped up. I have gotten another suggestion from Dave Benson about some resistor changes in the oscillator section. I will give this a try and see what happens. I did change the C23 (not sure on that number, no schematic in front of me) from 5 pf to 10 pf as he suggested and not difference in the power output. As a matter of fact, the output seemed to get more trashy at lower power levels with the cap change. I am beginning to wonder if it really is an inherent design problem, or if there is something else wrong that I have not found like a build error or bad component. I will confess that I have not devoted the time and the equipment in the lab to really try to find out what is going on, but it would appear from the other 2 30 meter versions that I helped get on the air and what I have been reading on the list, I am more and more inclined to believe that there is a marginal component somewhere or something. I cannot believe that I am the only one in the world that has a rig that only puts out a half a watt without the spectral purity going to heck in a handbag.

Do I sound frustrated or what?#8^)

Jess NOTFI

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: David Negaard (Oberon-) <negaard@graceland.edu>  
Subject: [1678] Re: NOTE 07/13/95 10:13:46  
Message-ID: <199507131611.LAA02548@draagen.graceland.edu>

>>>> "NN9K" == PB13128 <PB13128@deere.com> writes:

NN9K> Subject: Internet QRP magazine

NN9K> Is it time for a monthly/quarterly QRP publication in an  
NN9K> electronic format?

YES!!!

NN9K> All of the various QRP related magazines or newsletters e in  
NN9K> existence certainly serve a useful purpose and I wouldn't want  
NN9K> to see them replaced. But if you look at the world wide  
NN9K> audience of this reflector and the impossibility of subscribing  
NN9K> to all of the paper publications isn't it time for an internet  
NN9K> QRP publication?

This would be ideal for someone like me who, though very interested,  
just can't afford to subscribe to any, much less every good  
publication out there. If deals could be worked where second



publication could be via virtuality, I'd actually get to \_see\_ some of the excellent articles that are apparently being written.

What's more, I'd be thrilled if it could include schematae and the like, since the text-only medium sometimes falls short and images can fill the gap.

Put it on the Web!

NN9K> [...]

Just my .02 worth...

--

o David Negaard	o negaard@graceland.edu
o Help Desk Technician	o <a href="http://www.graceland.edu/~negaard">http://www.graceland.edu/~negaard</a>
o 700 College Avenue	o linux-phile
o Lamoni, IA 50140	o 73 de KB0PXX

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: rgobrick@public.compusult.nf.ca (Robert J. Gobrick)  
Subject: [1687] Re: NOTE 07/13/95 10:13:46  
Message-ID: <199507131714.0AA06402@public.compusult.nf.ca>

Hi Pete,

Well a qrp-1 monthly electronic magazine sounds like a good idea but this assumes that you have a "highly paid" editor/publisher who will gather up all the threads and make some meaning out of the different topics. I personally try to keep hard copies (yes hard copies) of items that interest me (ie PIXIE II mods) and stick them in my Pixie folder which I am then able to transport to different areas of the house where I do my reading - 8^)

As far as original material goes I'd rather donate that stuff to the different club magazines and after they are published submit the article to the QRP-L archives with a header saying this info originally appeared in 72, QRPp, QQ, Low Downer, Q5er etc. Sort of keep the "printed" word alive and transportable (again see above for where my reading rooms are located)

So until Sony comes out with a newer "READMAN" which will take everything I wanted to know about QRP and let me write it on a mini-disk that fits into my transportable READMAN then I don't see me jumping into the next wave of Xanadu hypertext.

Now just for the benefit of the qrp-1 readers - maybe you have something here Pete - why heck didn't "Wired" magazine start this way.. Can you imagine a QRP version of Wired - why heck we could even get Nils as our



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From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: Bill Acito 13-Jul-1995 1345 <acito@asdg.UNET.dec.com>  
Subject: [1689] re: RS12/13  
Message-ID: <9507131753.AA13930@us1rmc.bb.dec.com>

To all who have responded directly, thanks.

I was able to pull down some Windows-based tracking software from the AMSAT home page last night, along with the current Kelpernians and background info on each bird.

(for those interested, AMSAT is at...  
<http://www.amsat.org/amsat/AmsatHome.html>)

Found out there was a nice pass on RS12 about an hour later.  
Fired up the QRP+ on the beacon freq's (29.3xx MHz)... nada.

On a hunch, I fired up the Argonaut... could hear both beacons and a QSO in progress.

Looks like the QRP+ is not all that sensitive up on the high end.  
Can anyone else confirm?

I'll hit the operating manual tonight to check out exchange and signal report procedures, and will keep the group posted on progress.

It's supposed to hit the 100's here in the northeast this weekend; this should be a good activity to do downwind of the air conditioner. :-)

Once I get comfortable, if anyone else want so to set up sched's, let me know.

b

. . . . . - I own my own words - . . . . .

Bill Acito	d i g i t a l
acito@asdg.enet.dec.com	Digital Equipment Corporation
	Digital Semiconductor - Fab 6
	Hudson, MA

kc1gs  
(qrp-ne #260, norcal #1147, arrl life)

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: "rohre" <rohre@arlut.utexas.edu>  
Subject: [1661] RE: Shielding Twin Lead?  
Message-ID: <n1406547063.87784@msmailgw1.arlut.utexas.edu>

WHY? IF you do not run the twin lead closer than whatever the standard TV twin lead stand off is, to a conductor, there should be NO radiation or pickup, if both ends terminate in balanced systems. The RF is an energy field between the wires, in that little dielectric space between them. Furthermore, if you twist the twin every foot or so, you expose both conductors equally to any nearby "conductor of influence" and the outside effects are removed. Twin line DOES NOT RADIATE if equal and opposite currents are flowing in the conductors which is the usual way it is used with a balanced antenna and transmitter coupling. The energy is between the two wire conductors, stored in the alternating magnetic and electric fields. The shield in TV line was to avoid the deforming of the cable (Moving in a wind for example,) producing a signal as a charge on the dielectric surface which might have an effect at low receiving signal power, but with the power in transmitting twin lead, I think you would have losses from the capacitance of the shield affecting the balanced conductors carrying the

transmitted energy in close proximity. After all, you were thinking the shield would cut down on coupling to other conductors, but what keeps your transmitted power from coupling and charging up the capacitance of the shield, which is after all, another conductor? There is going to be fringing capacitance from the open end of the shield back to the conductors completing the circuit. In RF useage, both ends of shields are usually grounded; in low frequency audio useage they are left open on one end to avoid magnetic single turn "ground Loops" carrying undesired current in parallel to a signal return. This seems a complex issue to most and you might read the book "Grounding and Shielding Techniques in Instrumentation" by my friend Ralph Morrison, an industry expert in these issues and learn the simple physics of these processes. He points out that signals reflect where there is a discontinuity in a shield be it grounding the shield at one end, or leaving one end open circuited. You would create more problems with transmitting if you attempted to use the shielded feed when it is not needed. Just follow the proper use of a balanced antenna with twin conductor parallel feed line: bring the feed off at 90 degrees to the dipole for its run to the station location as far as possible.

IF you don't match impedances at both ends you have turned your feed line into part of the antenna, and have a "tuned" line. Now this is what I think you are wanting to avoid, and use of a Match Box at the rig and an antenna that matches the impedance of the other end of the parallel line should minimize the problems you thought you would have, without the weight and expense of adding a shield, or using more expensive feed line than you need.

72,  
Stuart K5KVH

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: cebik@UTKVX.UTCC.UTK.EDU  
Subject: [1669] Re: troubleshooting  
Message-ID: <Pine.PMDF.3.91.950713064621.547389609A-100000@utkvx.utk.edu>

On Wed, 12 Jul 1995, chuck adams wrote:  
> The reason for this posting was that I found  
> my AC Hum problem. It was not the clock but  
> a lousy ground system. Cured that in a hurry  
> and now we are back on the air with no muss  
> and no fuss.

It happens every time. Hundreds, if not thousands, of us sent messages exploring every esoteric possible cause of the difficulty, and the problem turns out to be basic, fundamental, straightforward. Lesson: look for the simple and direct before exploring the distant, indirect, and complicated. We all tend to forget that from time to time, but now

Chuck will undo his ground system improvement occasionally just to remind us.

Wonder if one of the QRP journals should run a "simple problem that seems complex on the surface" exercise in each issue, perhaps as a contest requesting diagnoses, and publishing the results (or at least the names of those who analyzed it correctly), perhaps along with comments that are especially useful to QRP troubleshooters--or something like that. With more and more kits out there, troubleshooting will become ever more important to the QRP gang, and many have had little experience in this regard.

To further that goal, here are three rules I have adopted over the years as an overall framework for troubleshooting:

1. The very best diagnostic tool you have is the ailing piece of equipment itself.
2. The second best tool is the stuff that keeps your ears from touching each other.
3. The very last thing you want to do is to take everything apart down to the individual components: that tends to insure the equipment will never work right again.

A surgeon who heard these rules thinks they are pretty good rules of medicine also, but that is for another list.

As a small start in this direction for those who have not done much or any troubleshooting, learn to think about circuits functionally. Staticcally, circuits are configurations of components that have values. More dynamically, circuits perform functions and compoents do jobs that either aid that function or hinder it (often by having the circuit perform a conflicting function at the same time or instead). Transistors do not oscillate, circuits do (although a transistor itself can be a complex circuit in itself). Ideally, transistor amplify, one vital job in making a circuit oscillate under control. And so on. Remember that many components may do several jobs or contribute to several subfunctions simultaneously. A capacitor may couple, contribute to tuning, contribute to filtering, and contribute to impedance conditions or change, all simultaneously. The first episode in the Low Down series on QRP rigs seems to be a good start in mastering the functions of circuits and the jobs done by various key components. I recommend it.

Those for whom this is old hat are reminding me that this message is getting too long. May all your troubles be small ones and all your shootings small caliber.

-73-

LB, W4RNL

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: Monte Stark <ku7y@sage.dri.edu>  
Subject: [1675] Re: troubleshooting  
Message-ID: <Pine.SUN.3.90.950713072150.29605A-100000@vortex>

Hi LB and the gang,

I always tell the new tech's that they are their own worst enemy.

The one big, fat, always, number one rule is ; Make sure the thing you are trying to fix is getting power and that the on-off switch is really set to "on"!

Every single tech I know that has been doing this fixing stuff for very long has tried to take readings from a radio that was turned off. And I don't mean like one measurement and then "Geeesh, the power is turned off".....I mean like 1/2 hr to maybe even 1/2 a day spent before waking up!

I can even tell a good story about a Motorola FTR up in Oregon getting lots of us involved helping him before one (the boss of course), looked at it and asked if he thought it might work better if he turned it on first! This was fun because it turned out that the on-off switch only shut down the osc and left the power on to all the rest of the unit!

Anyone else wanna fess-up?

73, Ron, dah, dah (I'm three times slower than Chuck)

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....  
...ku7y@sage.dri.edu.....Sun Valley, Nevada....  
.....ARRL.....NorCal #330.....NRA LIFE.....

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: GREGOIRE@VALLEY.NET (ERNEST GREGOIRE)  
Subject: [1690] Re: Zipcord Dipole  
Message-ID: <199507131818.0AA09014@dartvax.dartmouth.edu>

>Hi Gang:

>  
>A while back, someone on the list mentioned the possibility of using zipcord  
>separated along one end to form a dipole.

>  
>Bob Sparks AB5ZD email: robsparks@aol.com

>  
Hello Bob, I was just looking at that very same design in the  
AARRL antenna book it might be in the hand book too, I was looking  
at both of them last night. (My bed time reading, isn't that what  
all ham radio nerds read before retiring)?

You just zip the cord,tie a knot it it at the feed point, and connect  
the still unzipped end to the rig or tuner.

Thanks for the tio on the DX

de AA1IK

Ernie

>

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: prvalko <prvalko@Oakland.edu>  
Subject: [1691] Re: Zipcord Dipole  
Message-ID: <Pine.OSF.3.91.950713143147.21963A-100000@saturn.acs.oakland.edu>

On Thu, 13 Jul 1995 Robspark@aol.com wrote:

> Hi Gang:  
>  
> A while back, someone on the list mentioned the possibility of using zipcord  
> separated along one end to form a dipole. The other, unseparated portion  
> would then be run ladder-line fashion to, presumably, a balun or tuner. I

My elmer told me about this about twenty years ago. Seems he had a  
"dipole" that was made with a 100 foot length of zip cord and had like 30  
feet of wire on each leg of the dipole while the remaining 40 feet stayed  
together. He claimed it gave him a 50 ohm antenna and I think it was for  
40M.

Anyone want to put the facts to this urban legend?



=paul= wb8zjl

From qrp-1@lehigh.edu Thu Jul 13 19:03:00 1995  
From: rgobrick@public.compusult.nf.ca (Robert J. Gobrick)  
Subject: [1686] Re: [long] My experiences building the Pixie 2  
Message-ID: <199507131714.0AA06392@public.compusult.nf.ca>

Peter,

Thanks for the new Pixie "discovery" material - pretty soon this stuff on the Pixie II is going to appear in "WIRED" magazine.

73/72 Bob V01DRB/WA6ERB

>  
>Well, I had my first Pixie 2 contact last night. What  
>a neat little rig! Building it was an educational  
>experience, and the help I got from people I've never  
>met was nothing short of astounding! I'm writing  
>this to try to pass on a couple of things I learned.  
>  
>First, building the Pixie 2 on a sheet of copperclad,  
>ugly style, seems to eliminate a lot of the feedback  
>and grounding problems. With that big ground plane,  
>I had no problems with motorboating or RF where it  
>wasn't wanted. I put a 10 uF and a .01 cap in  
>parallel at the power input anyway.  
>  
>The transmitter came up right away. No problems  
>at all. But when I came back from Radio Shack with  
>my LM386, I couldn't hear anything at all. Not even  
>hum, when I touched my finger to the input pin of  
>the 386. After doing some checking with a voltmeter,  
>I discovered my battery was only putting out 5 volts.  
>(Moral: when testing a new project, don't rely on  
>the batteries you find in the fridge!). After replacing  
>the battery...still no audio. Well, clicks when I  
>turned the power switch on, but no band noise like  
>others had reported.  
>  
>I pulled out my trusty voltmeter again, and took a look  
>at the National databook. Hmm...3.5 volts on pin 6 of  
>the LM386...sounds a bit low. Check the data book.

>Well, it's supposed to run on 4 volts min. But  
>it can draw between 4 and 8 mA. That means a 1K  
>value for R5 is right on the hairy edge. Let's  
>try dropping it to 300 ohms and see what happens.  
>Bingo! Touching things with my finger now causes  
>hum in the headphones. But sticking a 10 foot piece  
>of wire in the antenna connector still produces  
>nothing in the phones.  
>  
>Well, out to the front yard with rope, 130 feet of  
>wire and a rock. Thank God for trees! [1 hour  
>later] Connect coax to Pixie...hey! I hear stuff!  
>I guess it really needs an antenna before you can  
>hear anything :-)  
>  
>Called my friend who lives 5 miles away (for the  
>third night in a row) and asked him to fire up his  
>TS-430. He calls right back and tells me W1AW is  
>running code practice and he won't be able to hear  
>me. I turn on the Pixie and get my ears almost blown  
>off! Guess that amp is working!  
>  
>8:45 PM -- my friend calls again. W1AW has finished.  
>I get outside on the front porch [coax is short] and  
>start callnig him. I hear him answer [I slap mosquitos]  
>but he could just be calling me...I send him something,  
>but he doesn't reply. Call him on the phone. Yes,  
>he did hear me, I sound great! We have a short QSO.  
>This is a hoot!  
>  
>I built my Pixie in a plastic PacTec box which has a  
>9 volt battery compartment. The key is a kekboard key  
>and I added a power switch and an LED which draws 2 mA.  
>The only thing I changed from the original Pixie 2 design  
>is the LM386 power switching circuit. I changed R5 to  
>a third 2N3904, whose collector goes to +9V, the emitter  
>connects to C10 (I might add a 300 ohm resistor between  
>the collector and C10, to make the amp turn on smoother)  
>and pin 6 of the LM386. The base is pulled up to +9 with  
>a 4.7K resistor and also connects to the anode of D1.  
>Although this does add a third transistor, the amp works  
>\*really\* well, now, and the key down current wasted  
>goes down from 8 mA with R5 = 1K to around 2 mA.  
>  
>Great project! My sincere thanks to the designers and  
>most of all, to the qrp'ers who responded to my questions  
>earlier in the week! My advice to those who haven't yet  
>built this rig is to start warming up that soldering iron!

>  
>Peter  
>--  
>  
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>  
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